

FIG. 1

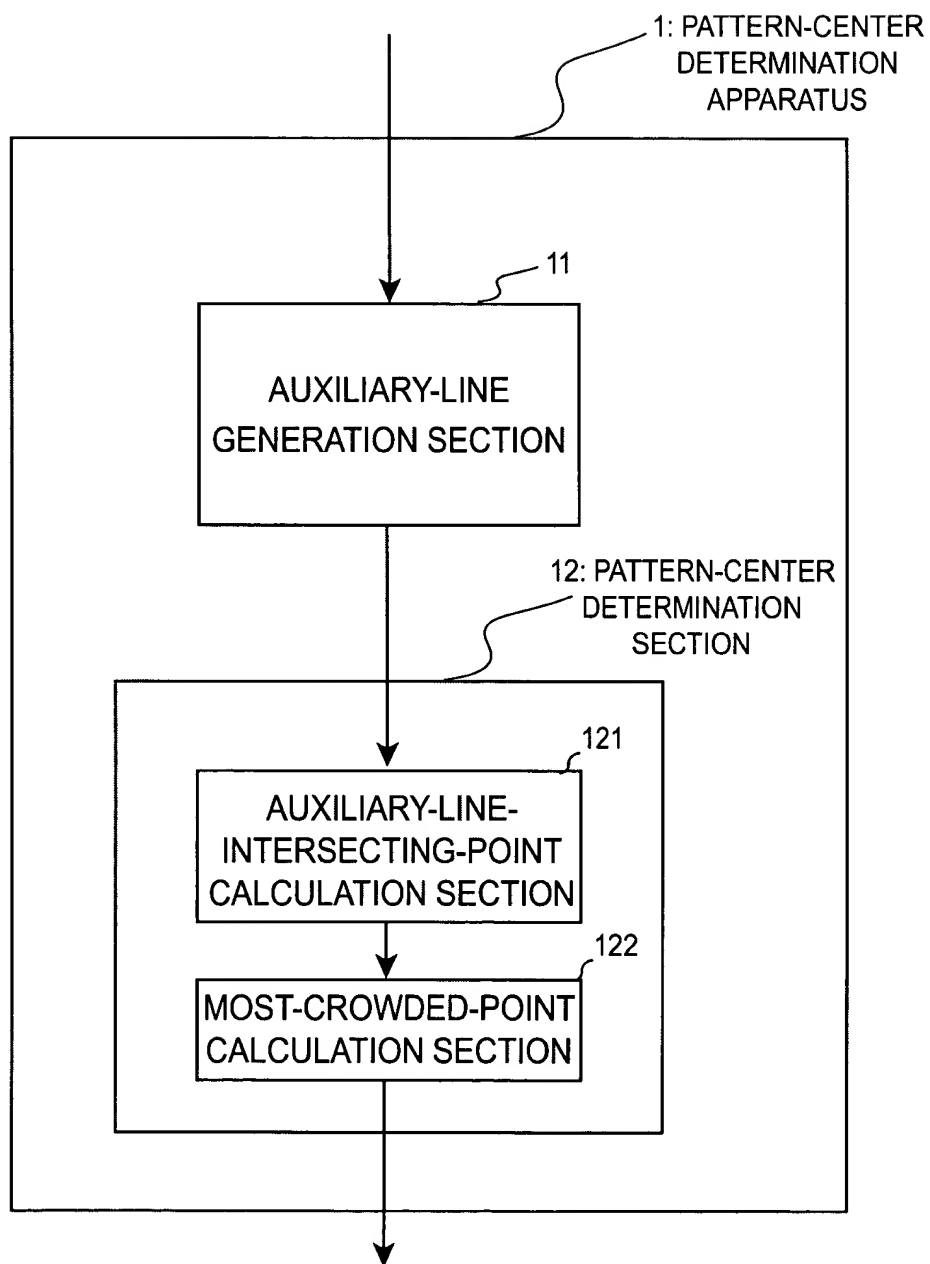


FIG. 2

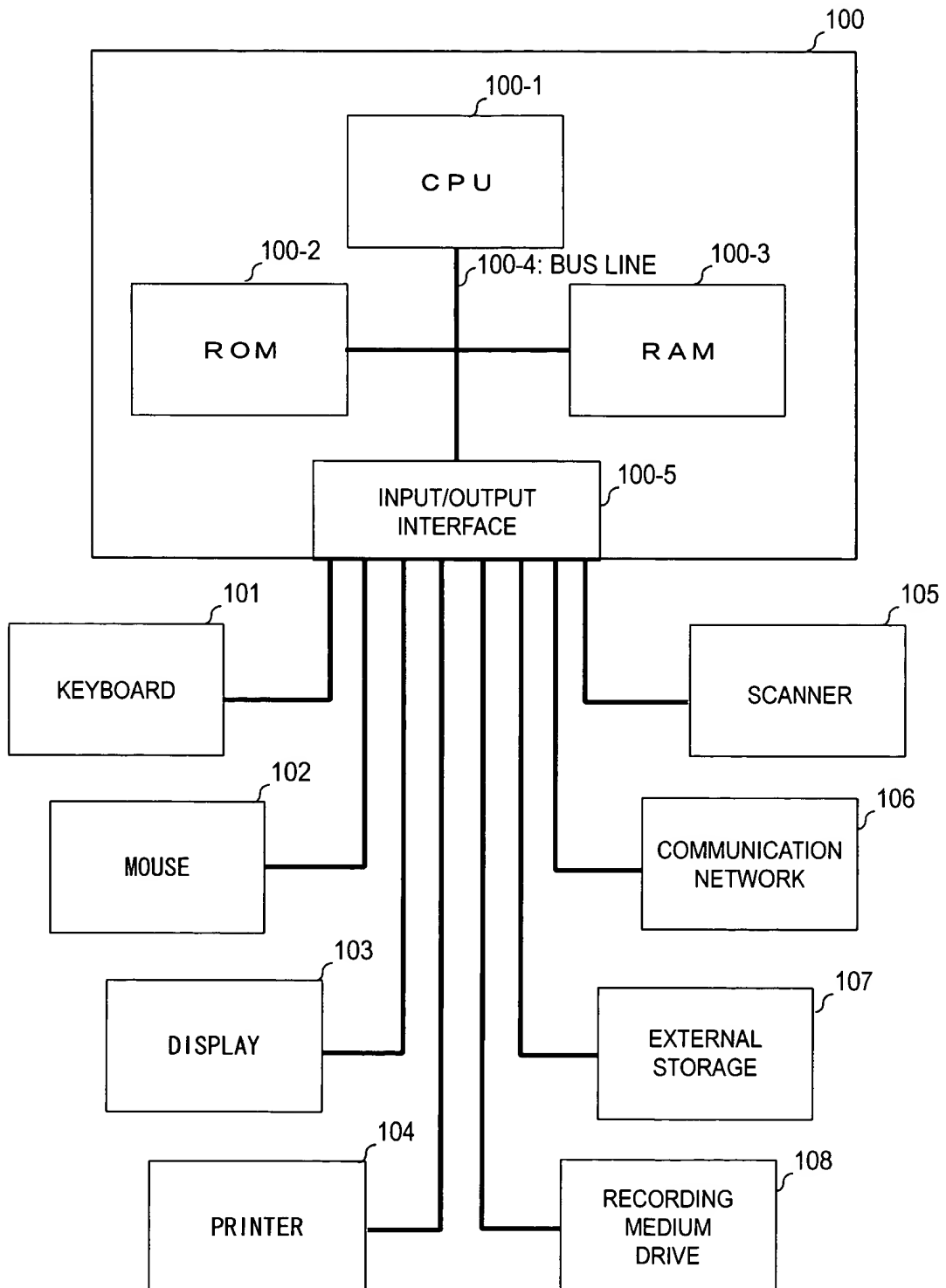


FIG. 3

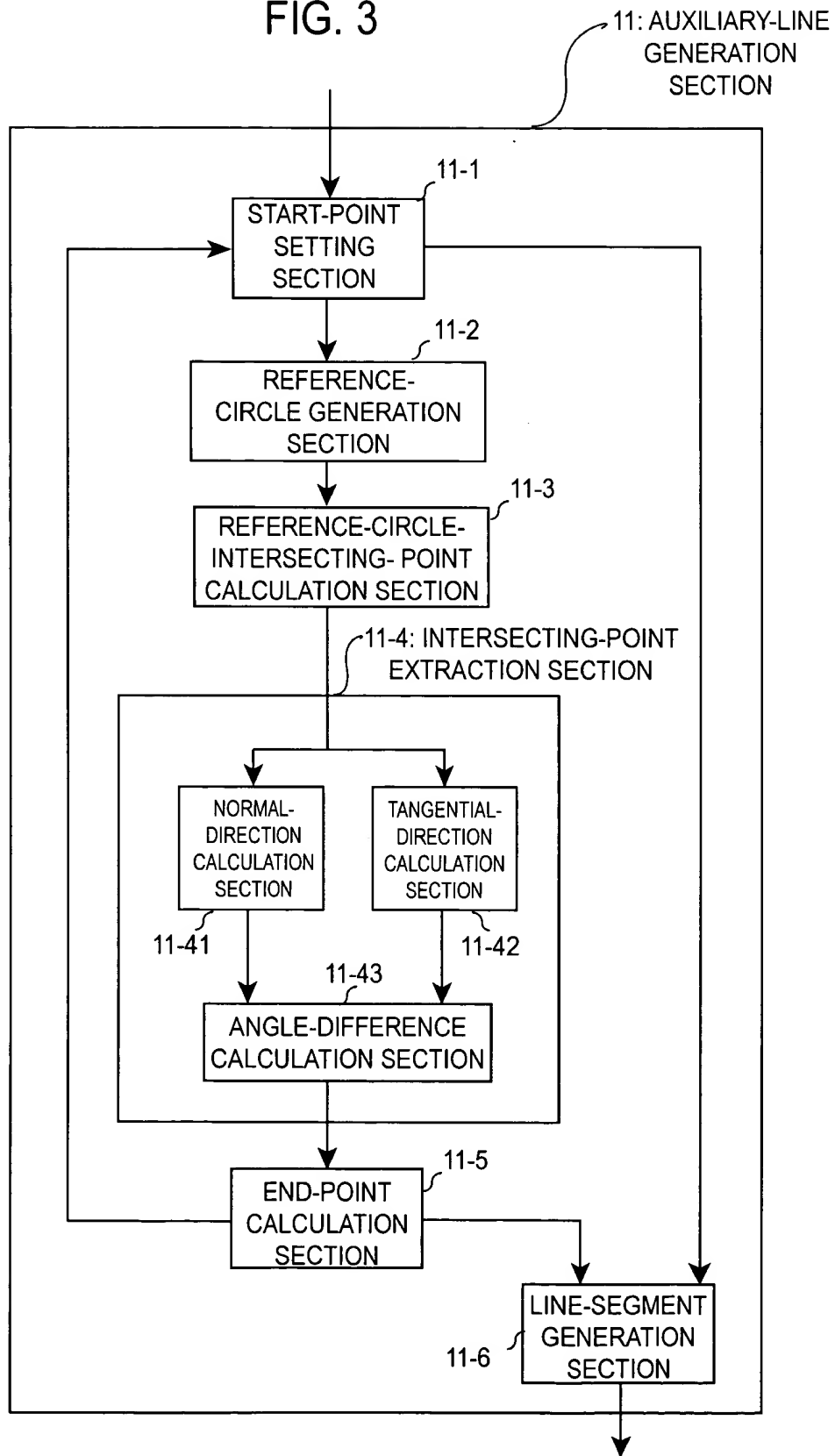


FIG. 4

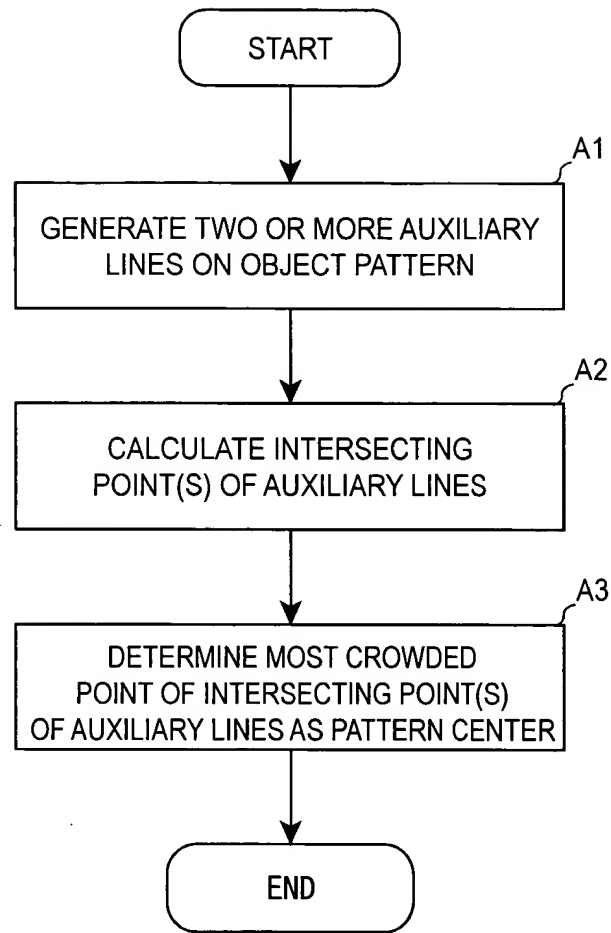
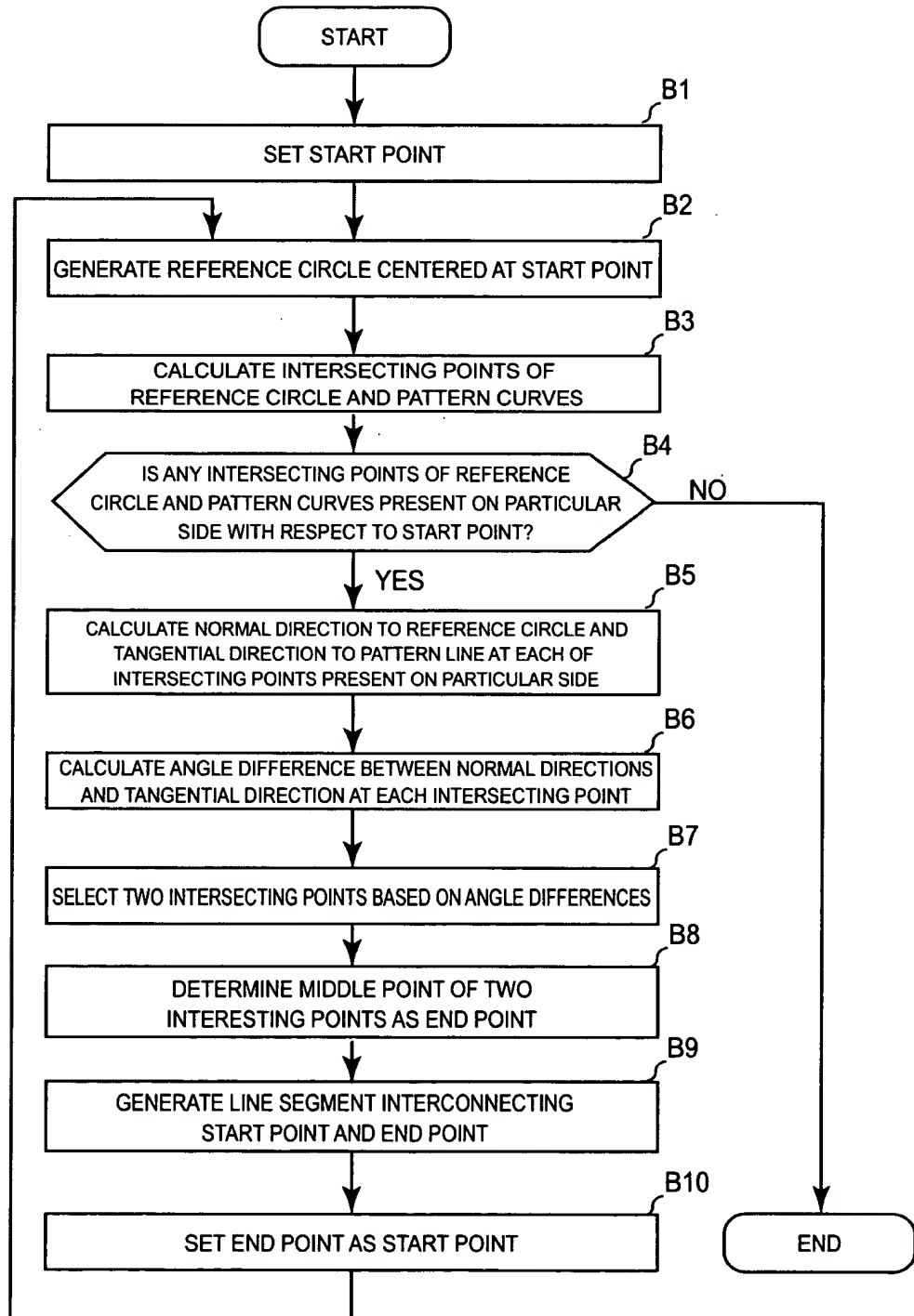


FIG. 5



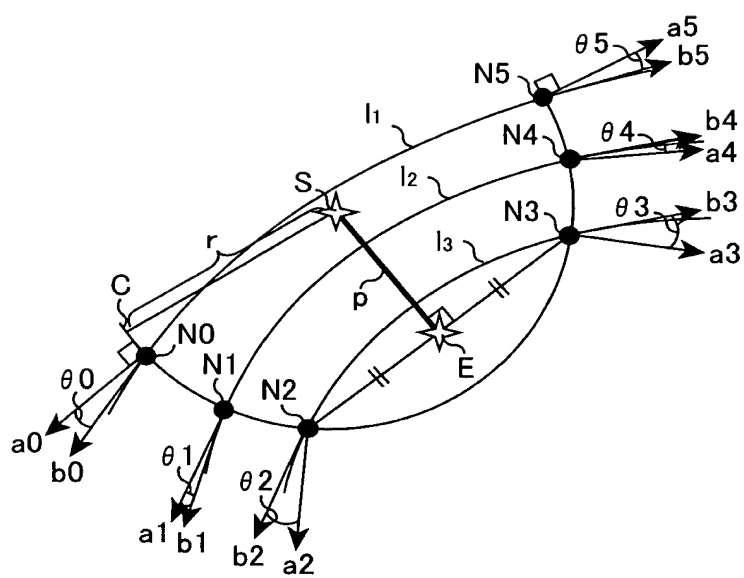


FIG. 6(B)

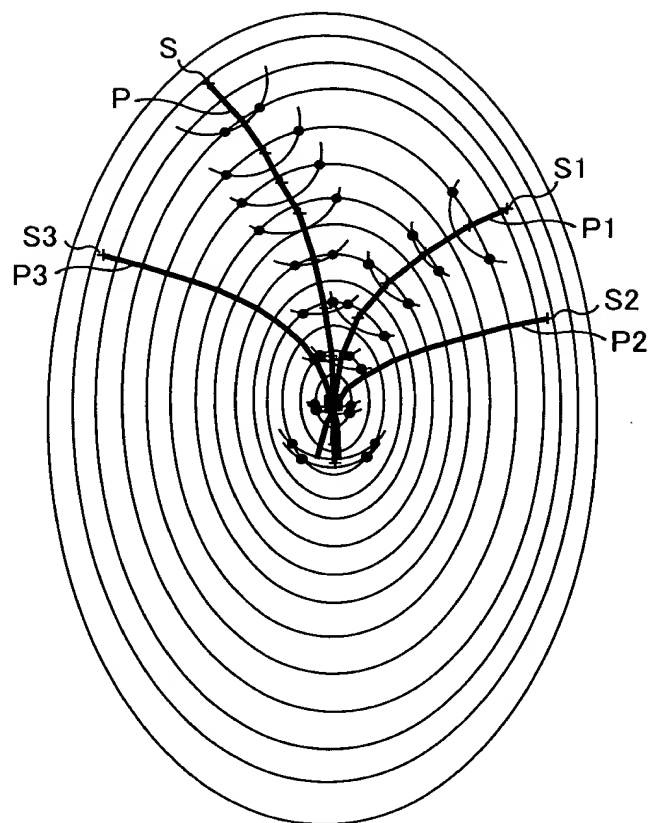


FIG. 7

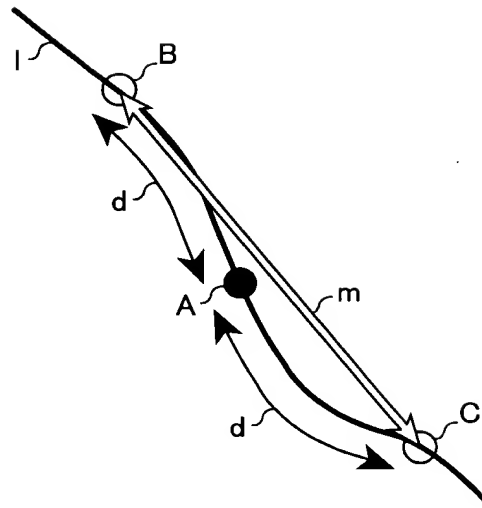


FIG. 8

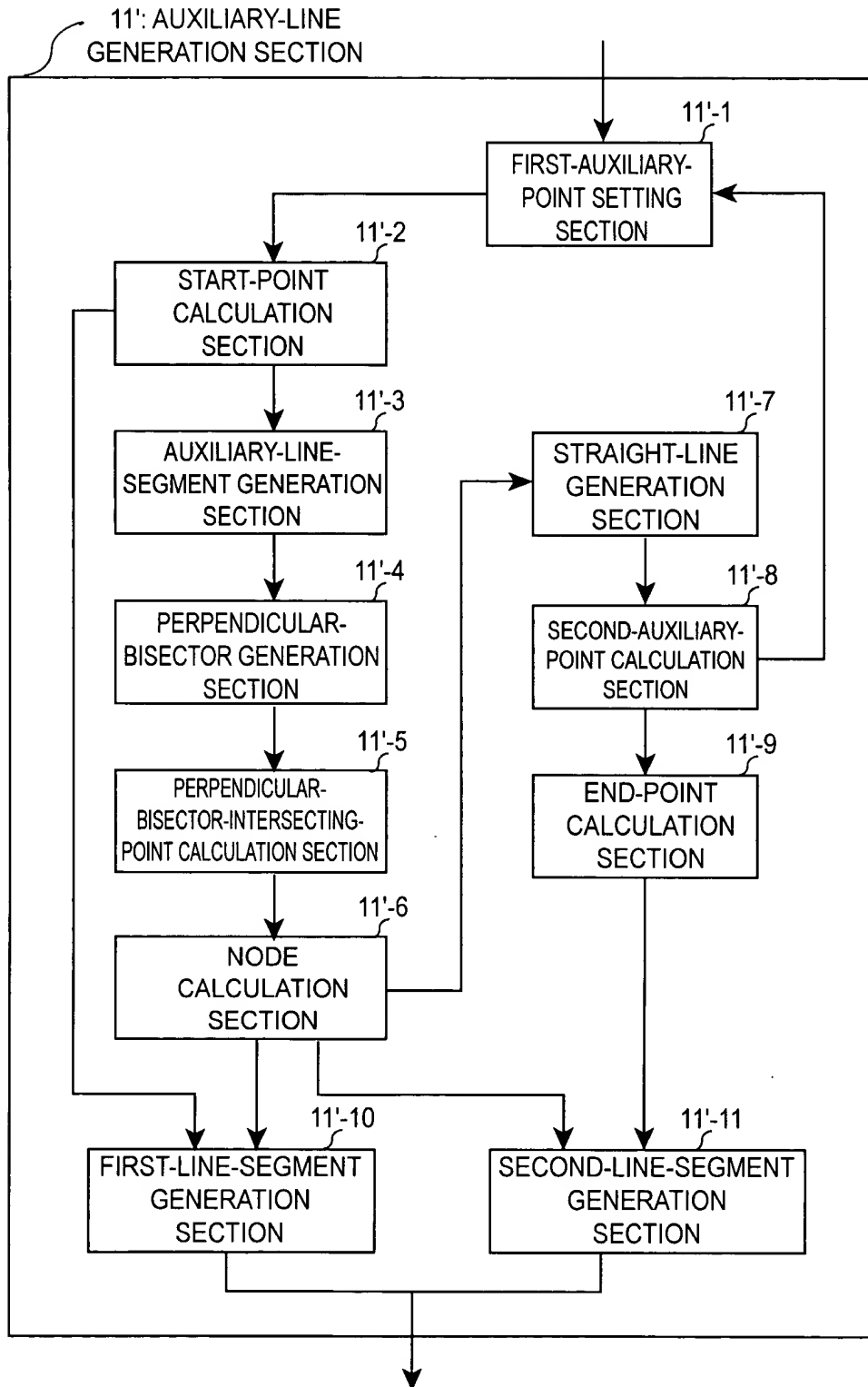


FIG. 9

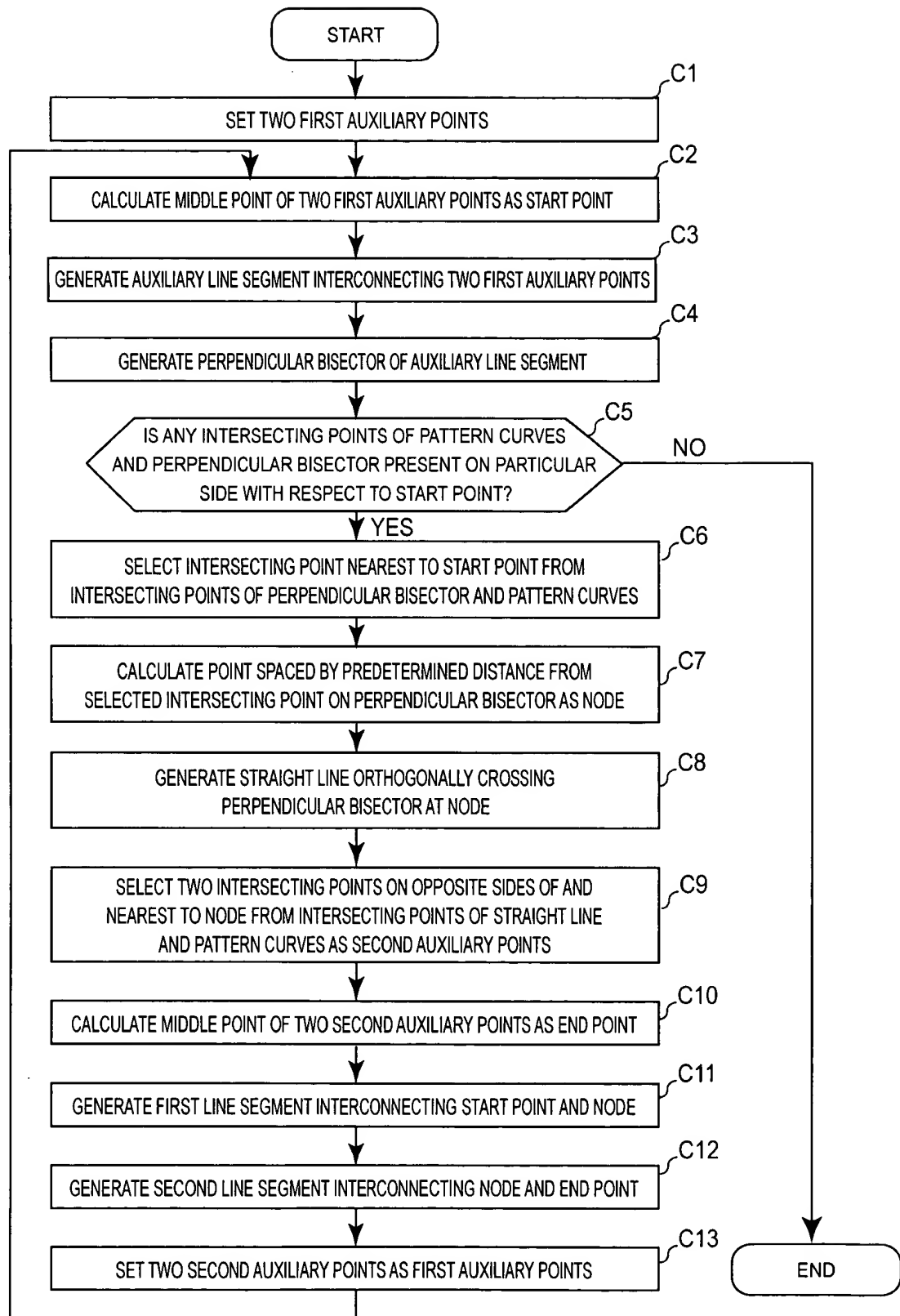


FIG. 10(A)

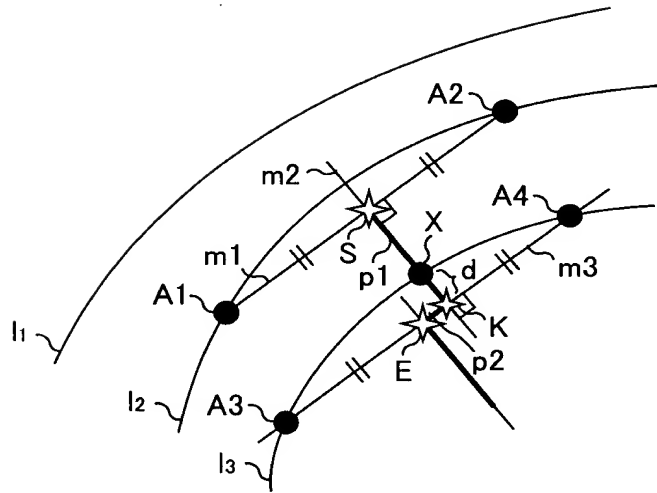


FIG. 10(B)

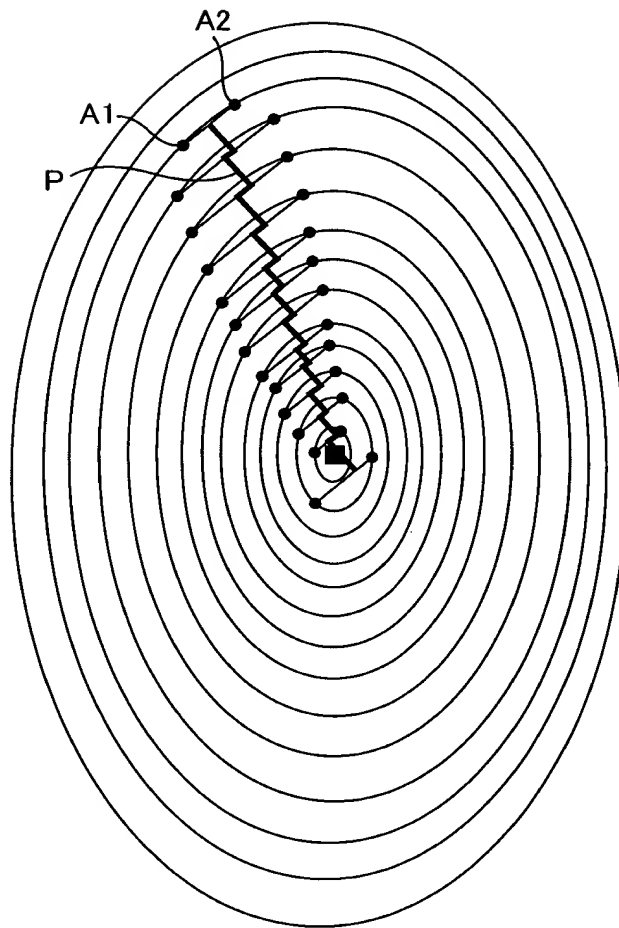


FIG. 11

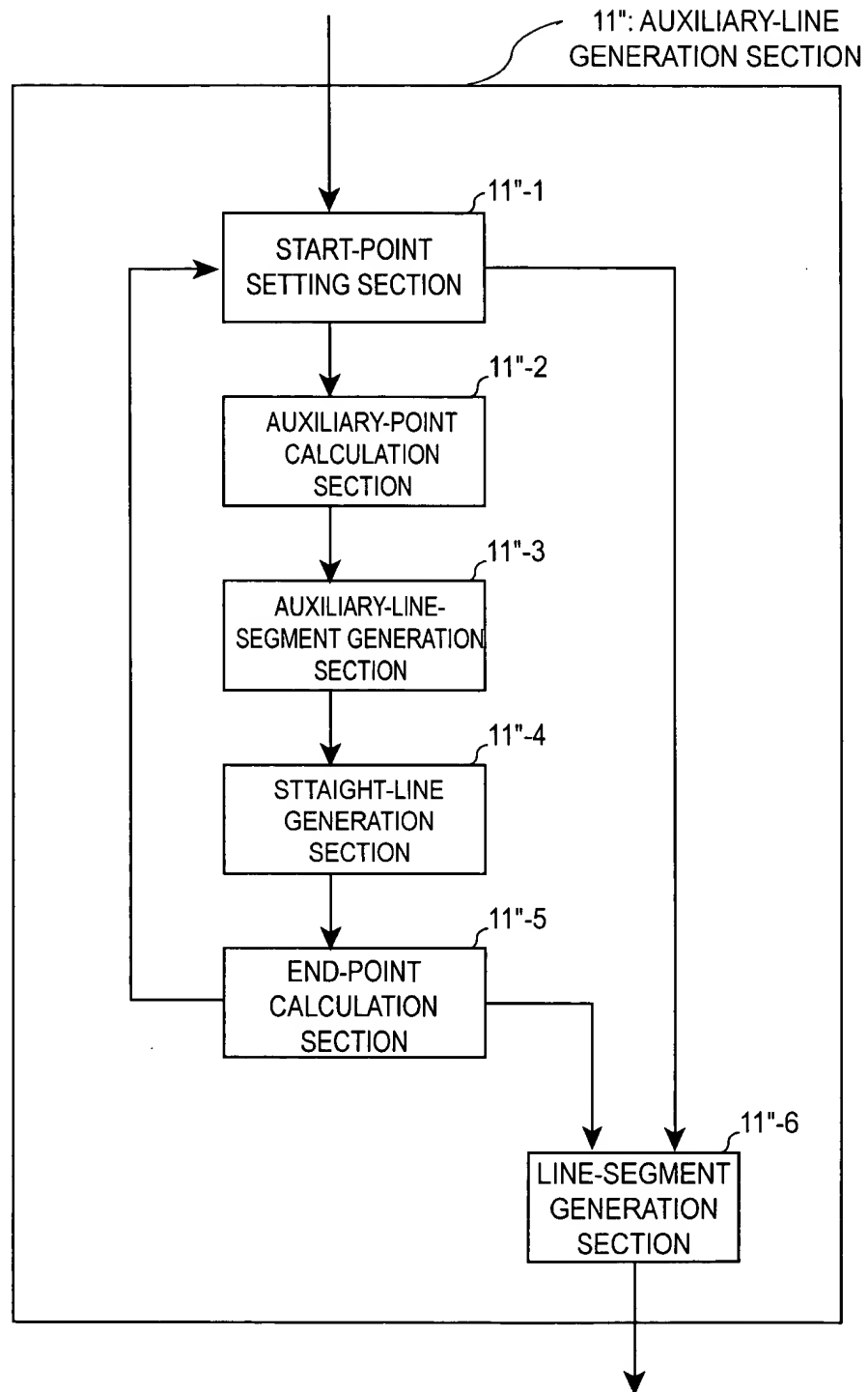


FIG. 12

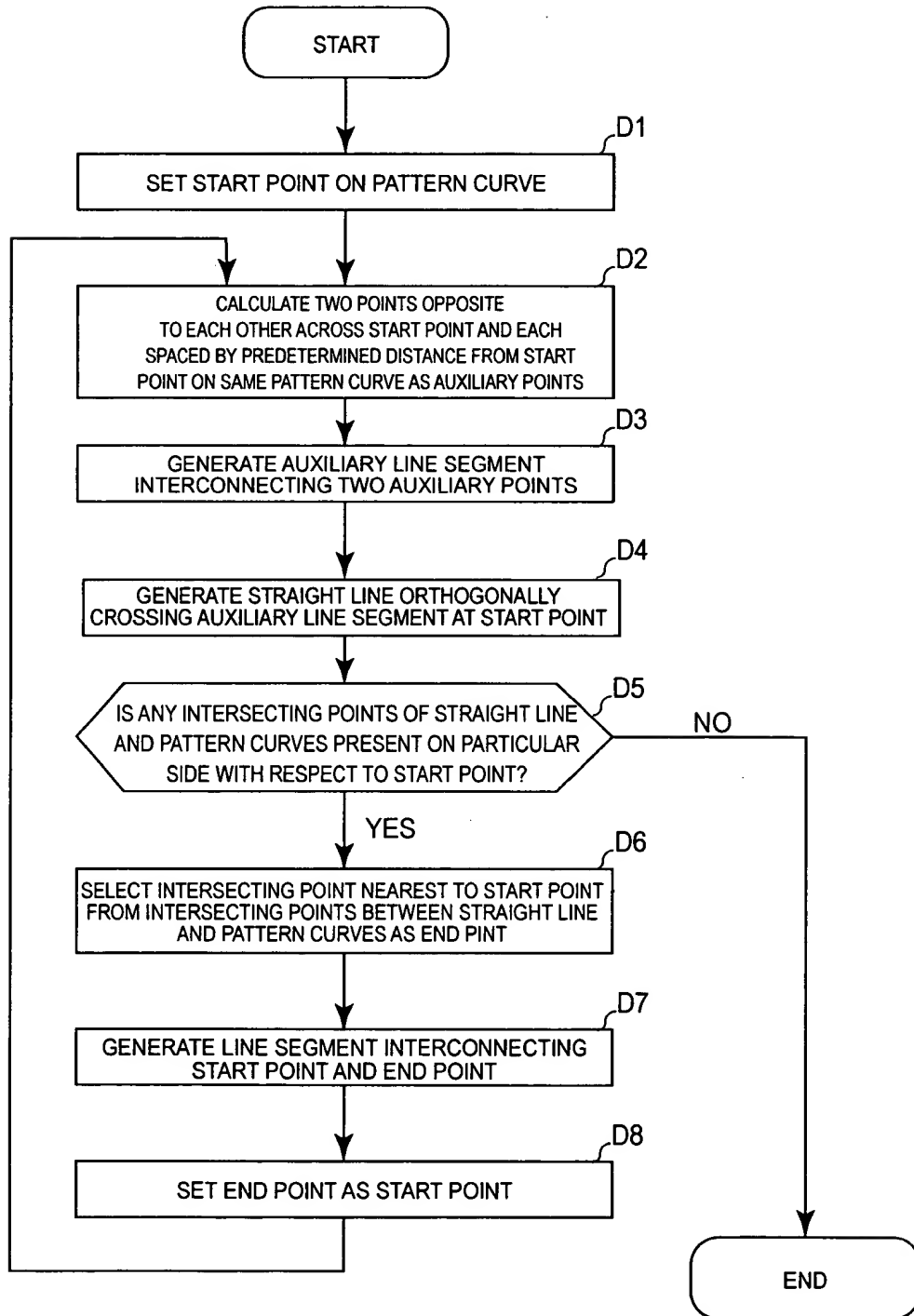


FIG. 13(A)

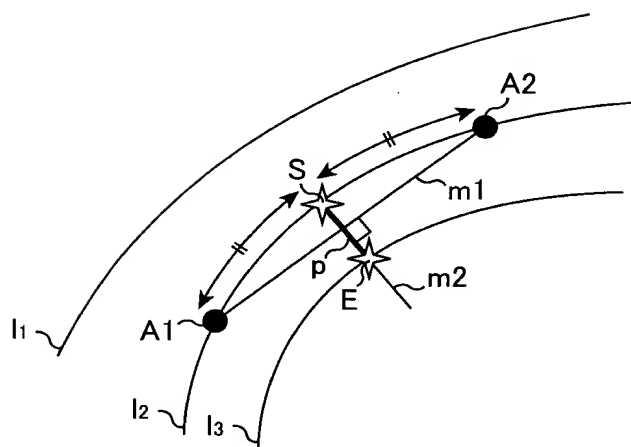


FIG. 13(B)

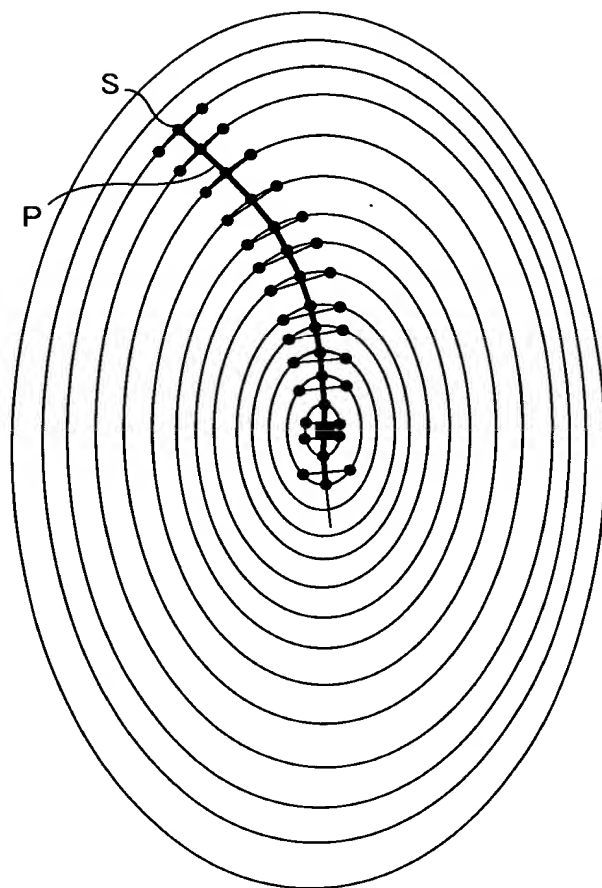


FIG. 14

2: PATTERN-ORIENTATION DETERMINATION APPARATUS

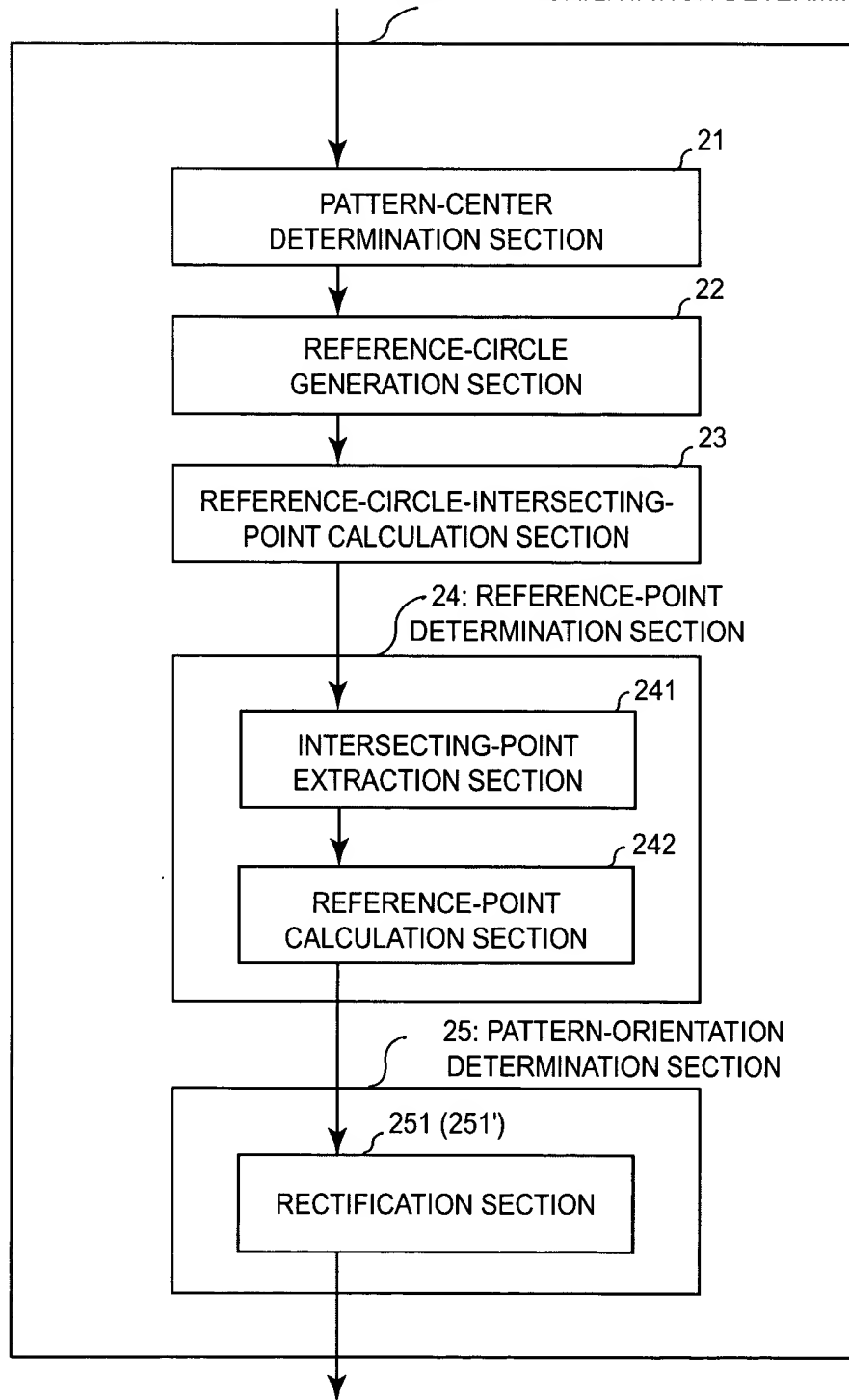


FIG. 15

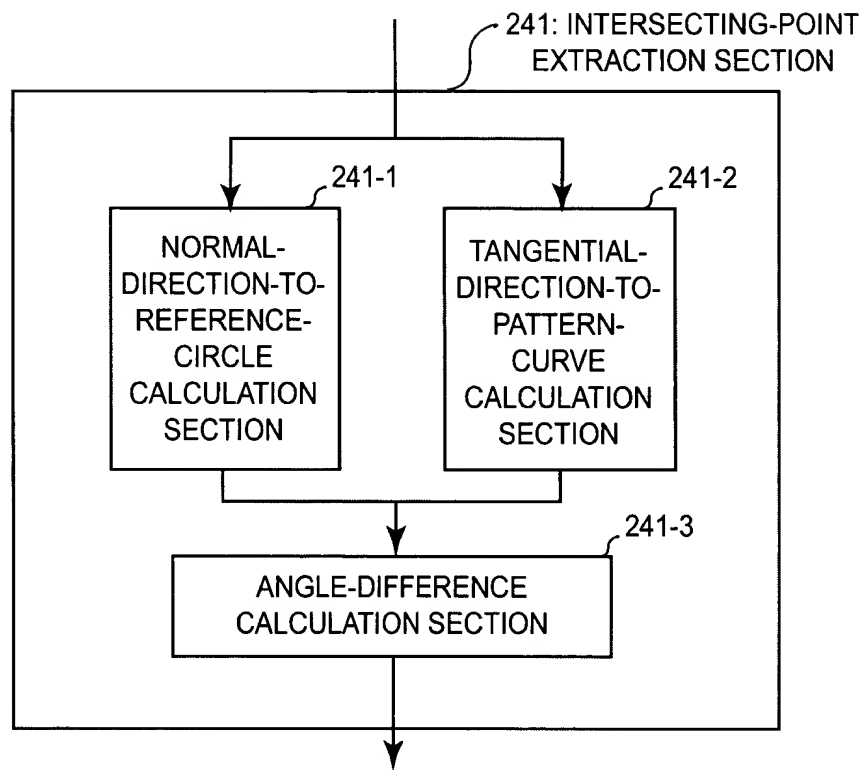


FIG. 16

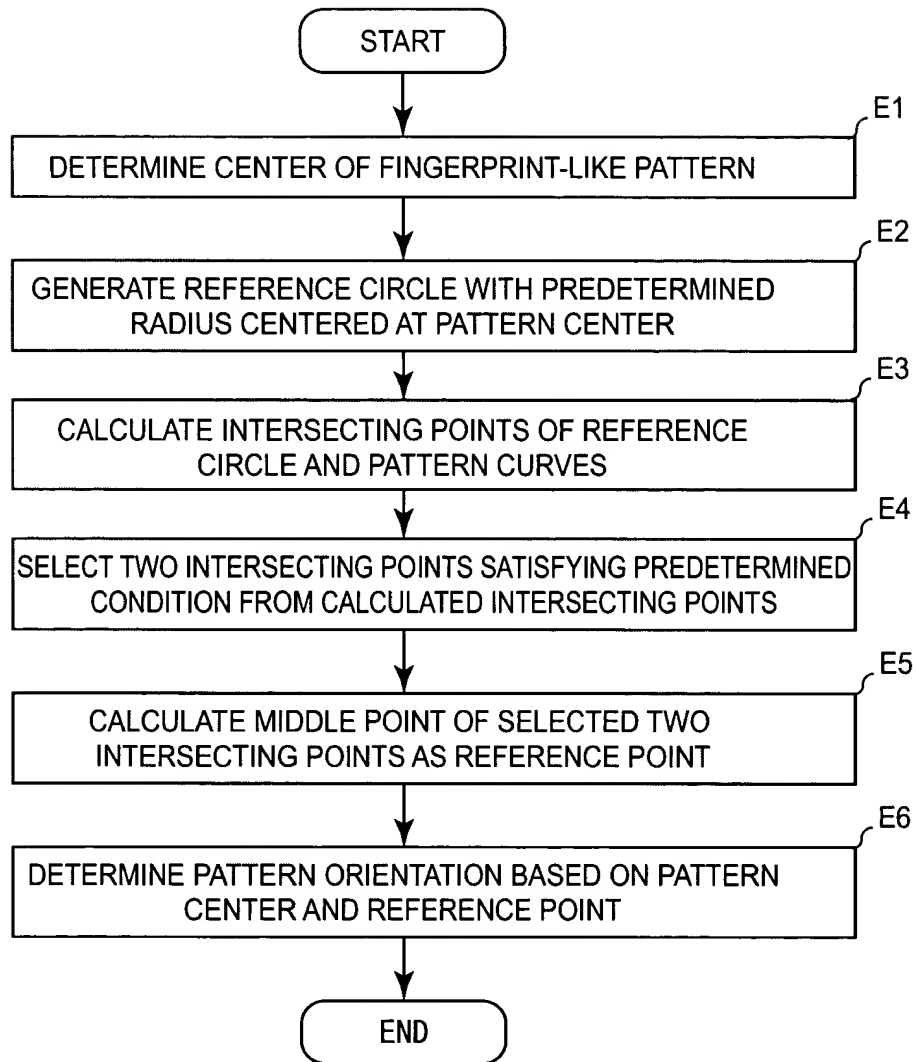


FIG. 17

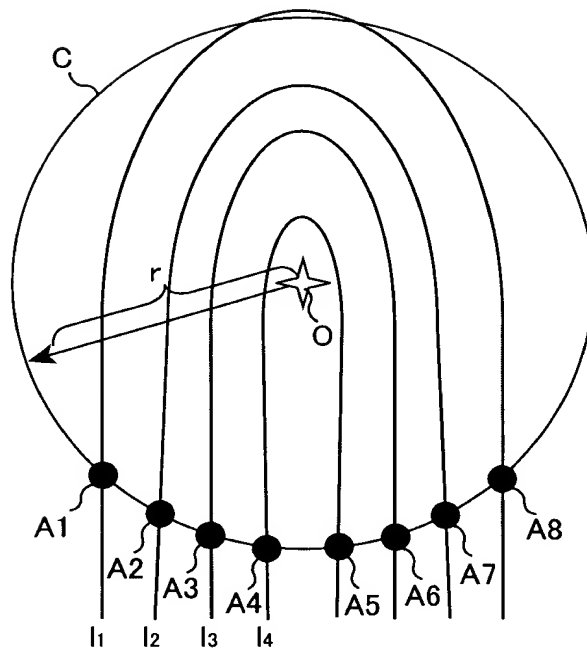


FIG. 18

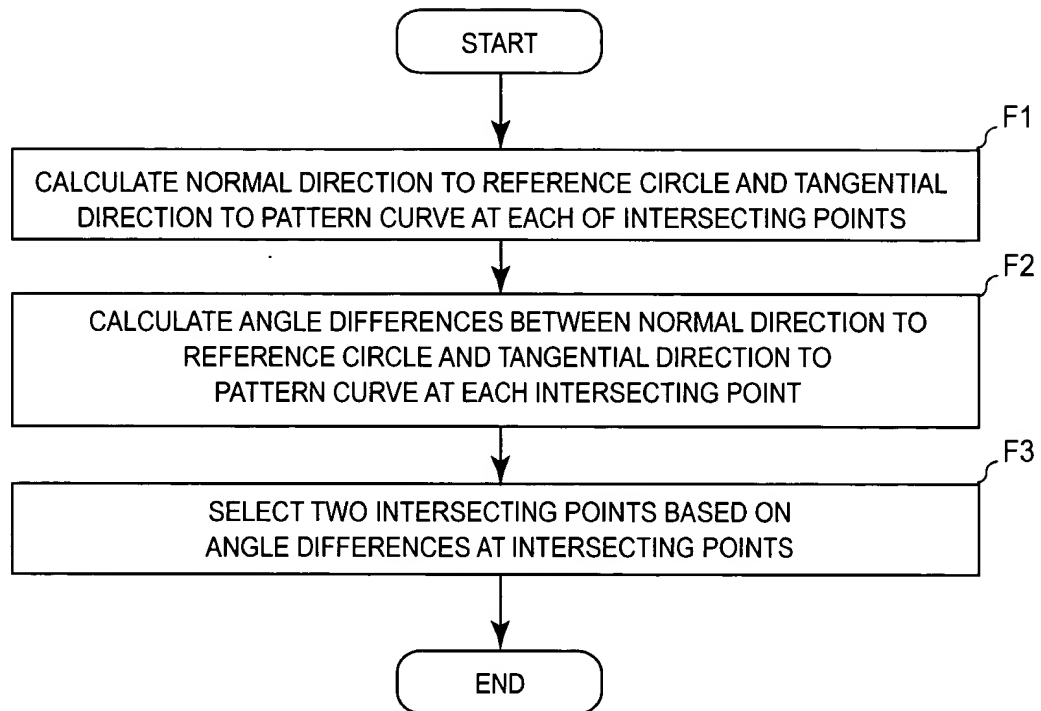


FIG. 19

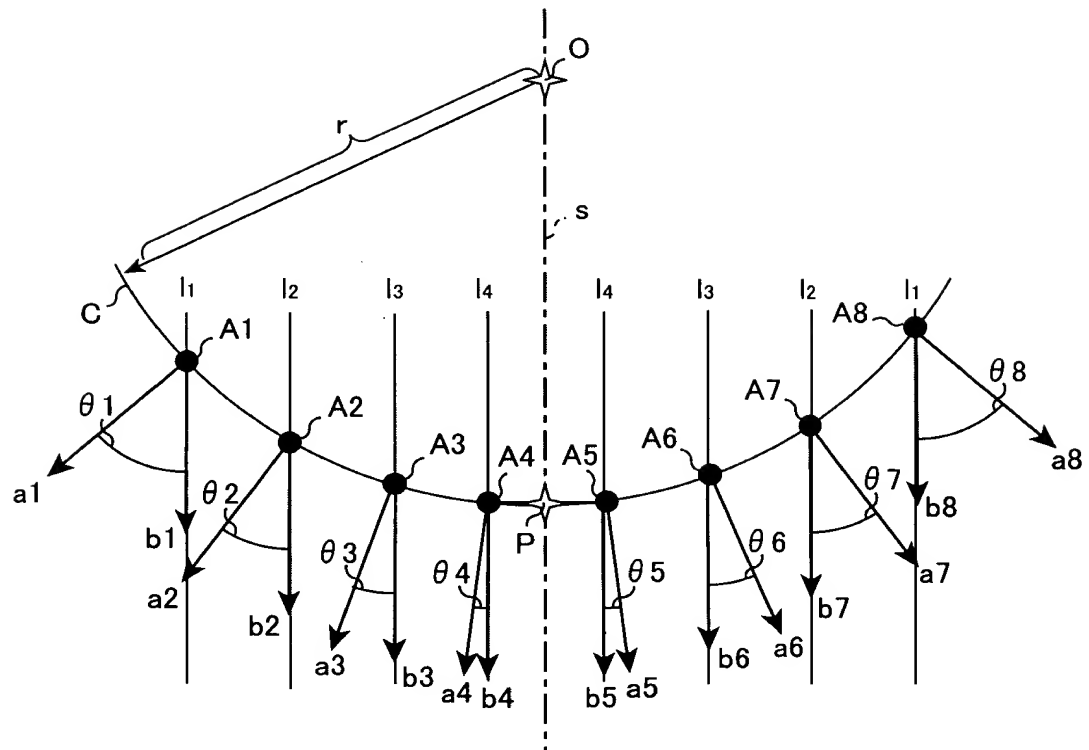


FIG. 20(A)

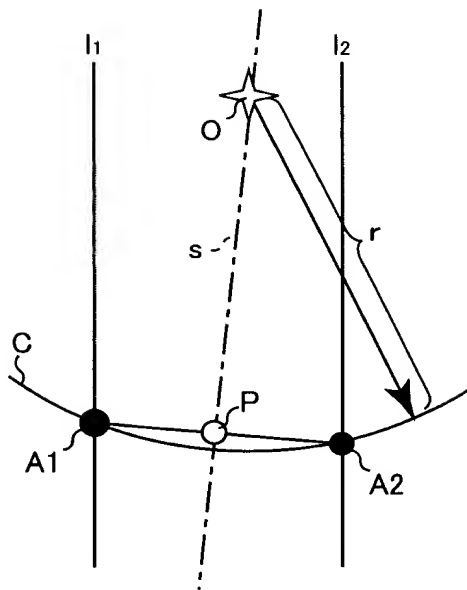


FIG. 20(B)

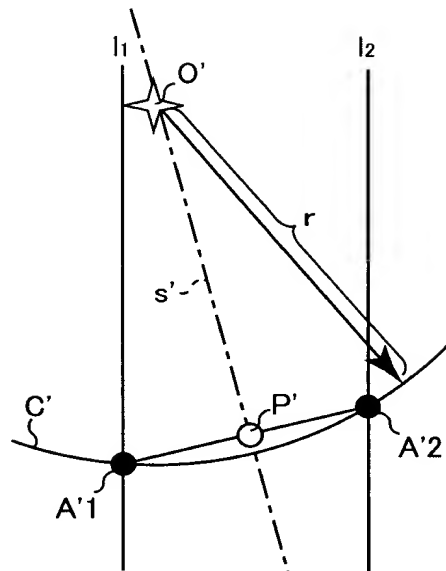


FIG. 21

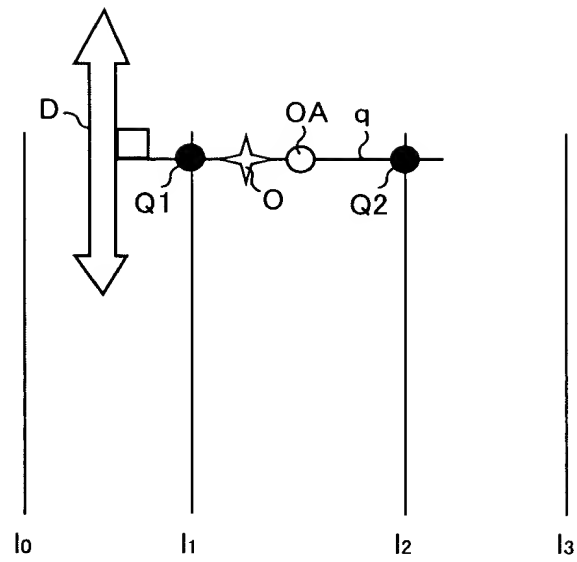


FIG. 22

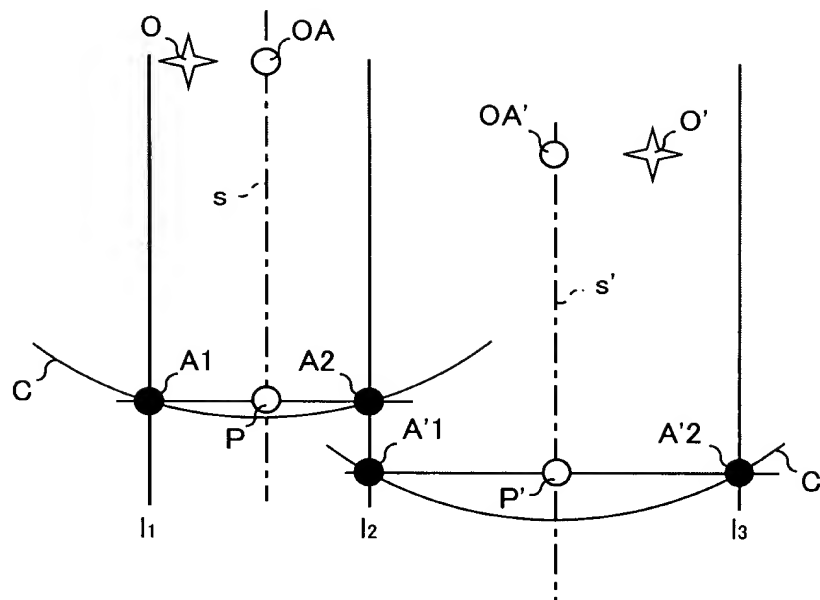


FIG. 23

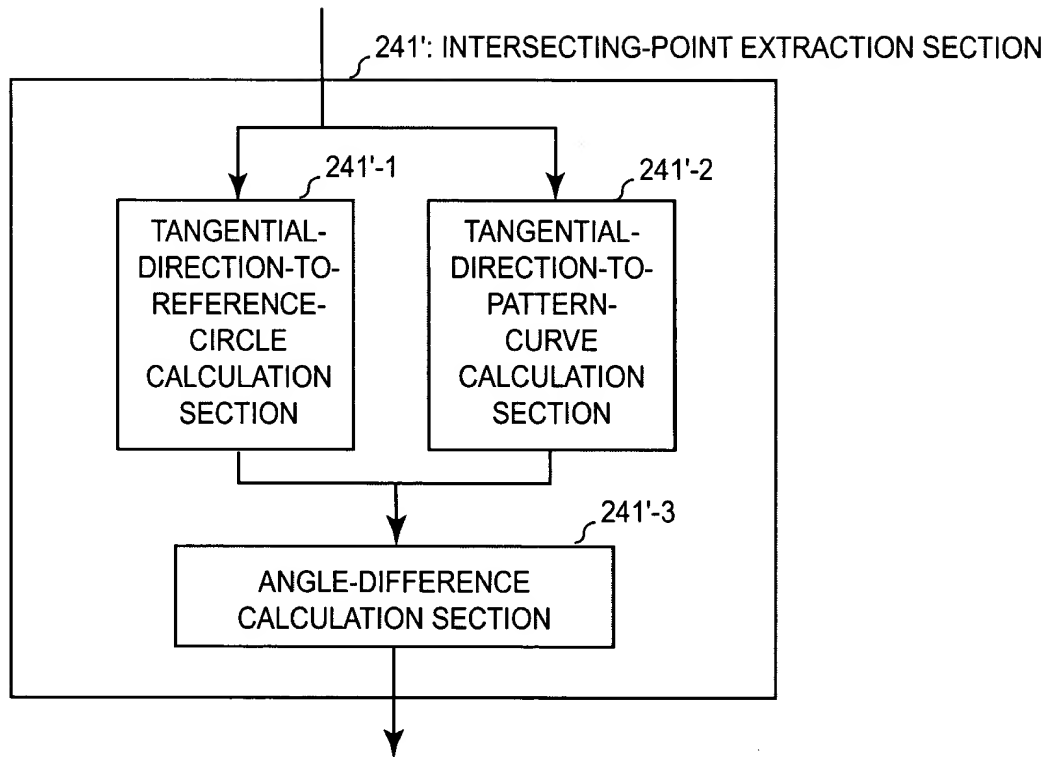


FIG. 24

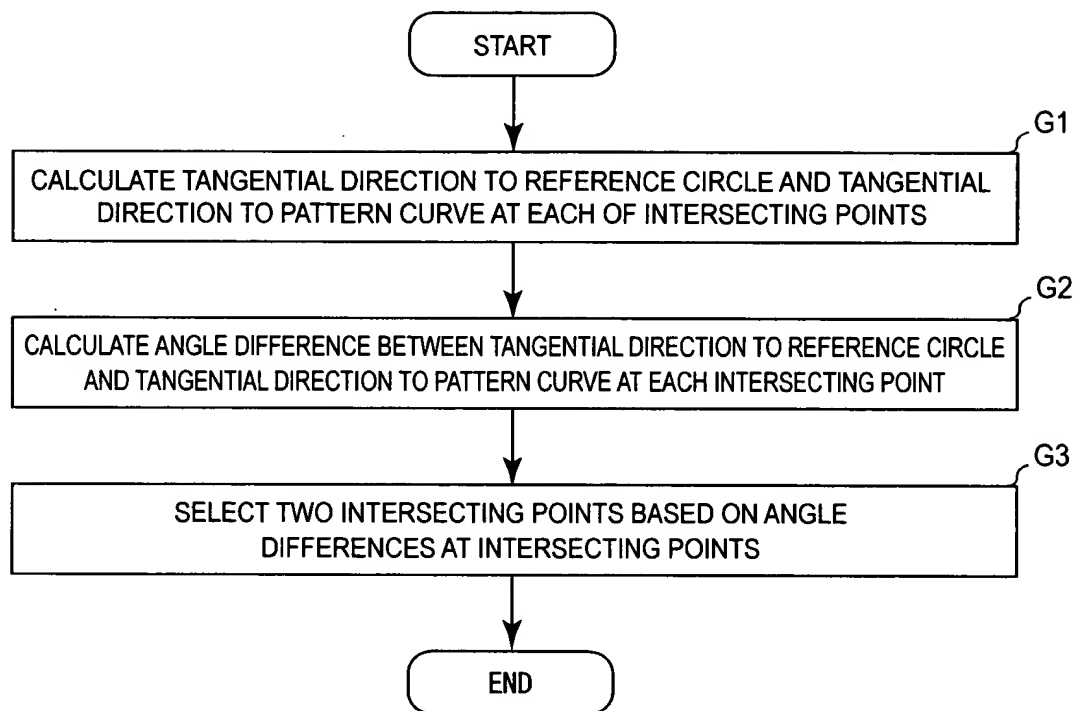


FIG. 25

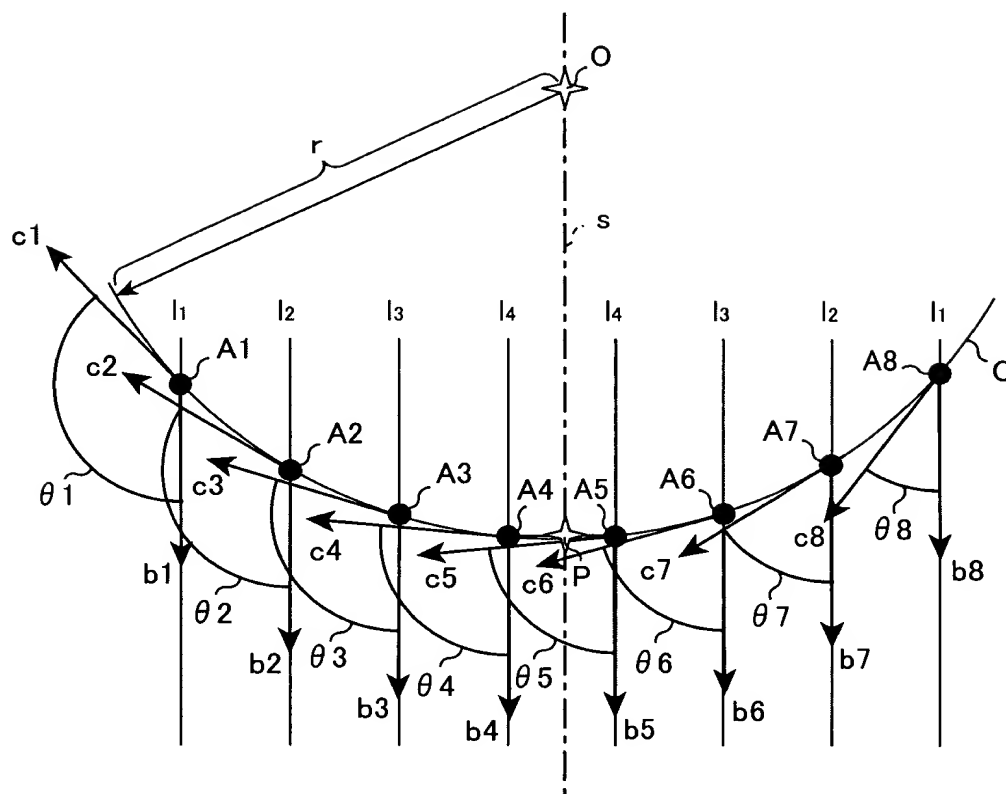


FIG. 26

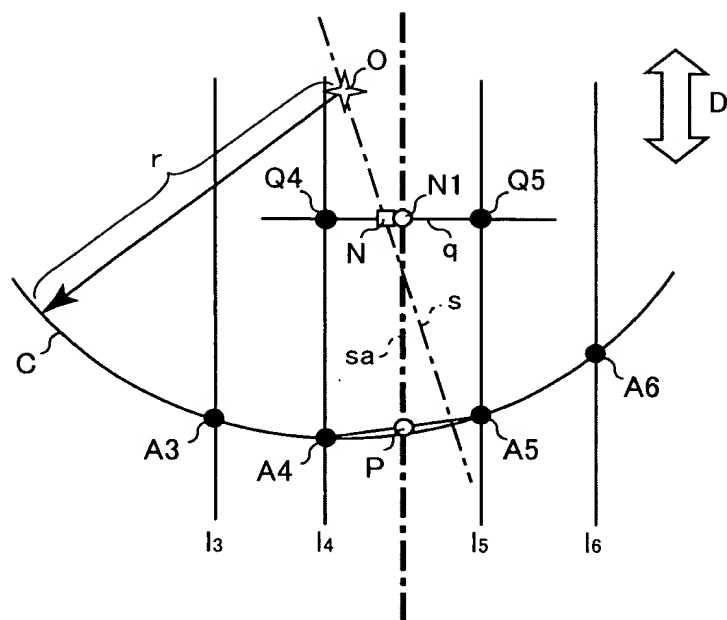


FIG. 27

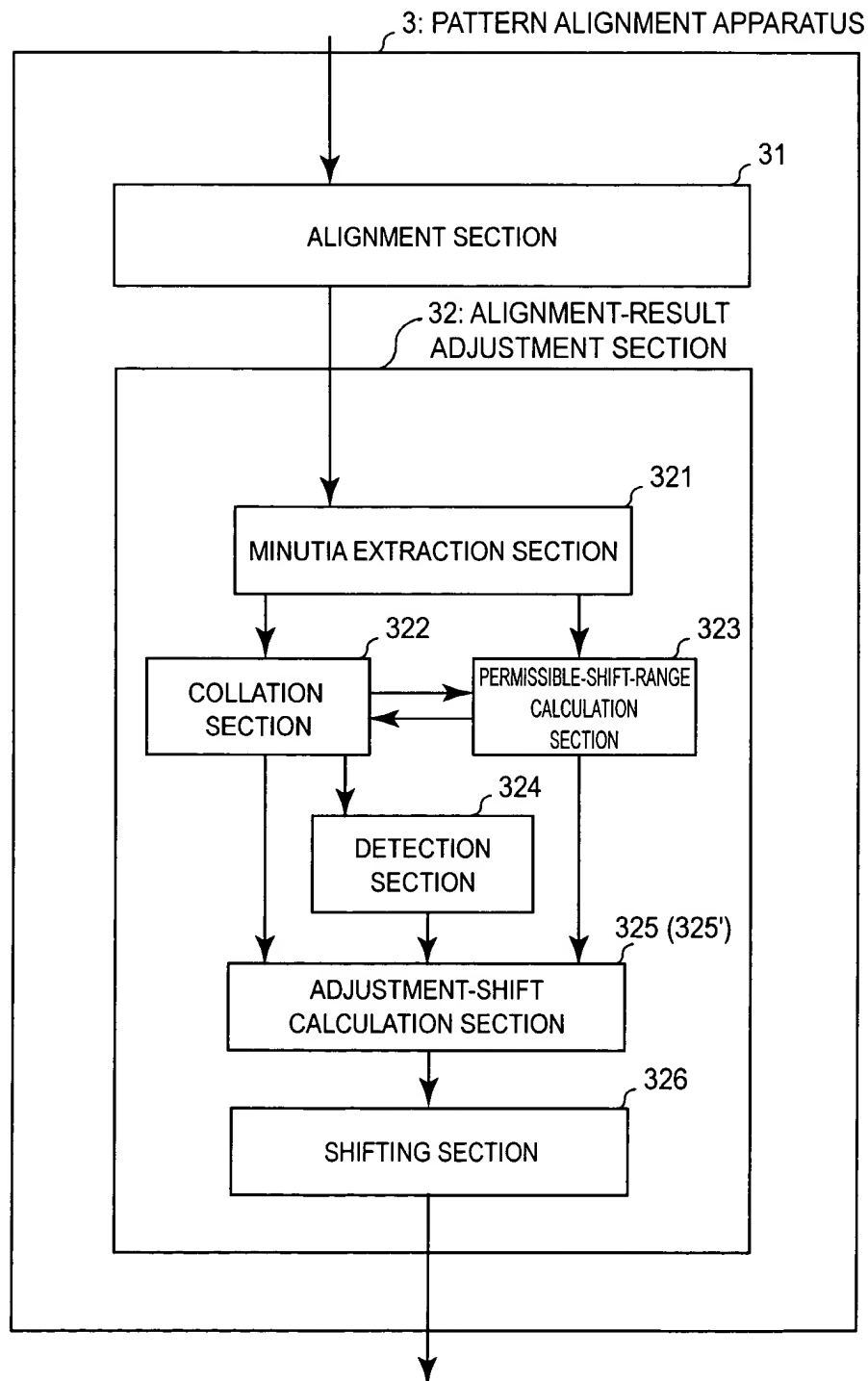
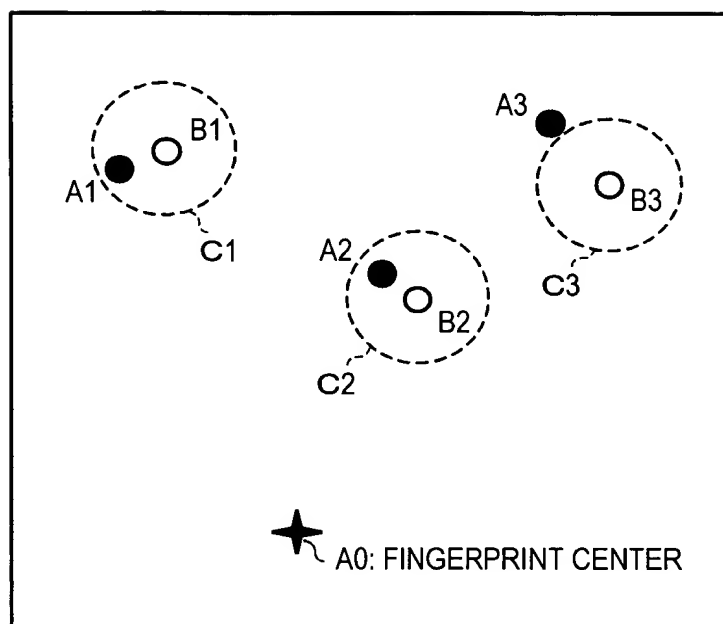


FIG. 28



● : MINUTIAE OF FINGERPRINT A

○ : MINUTIAE OF FINGERPRINT B

○ : THRESHOLD AREA FOR COINCIDENCE OF MINUTIAE

FIG. 29

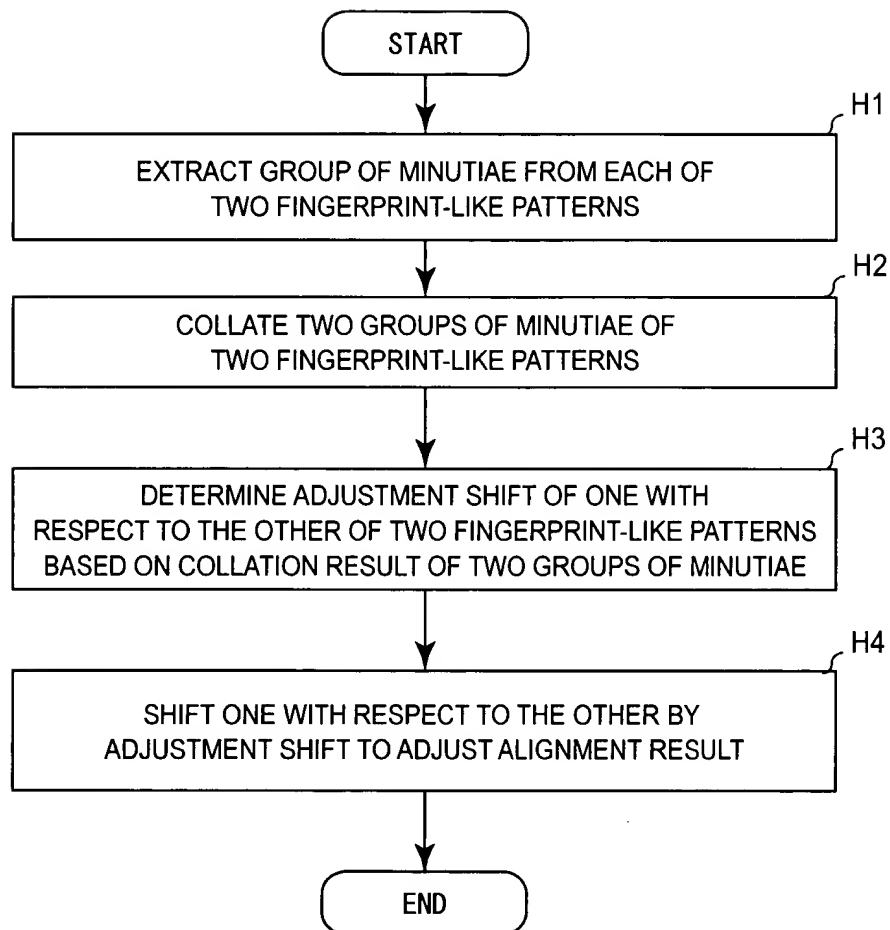


FIG. 30(A)

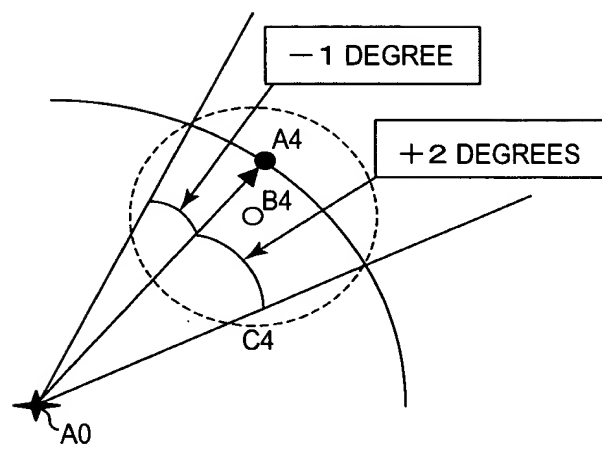


FIG. 30(B)

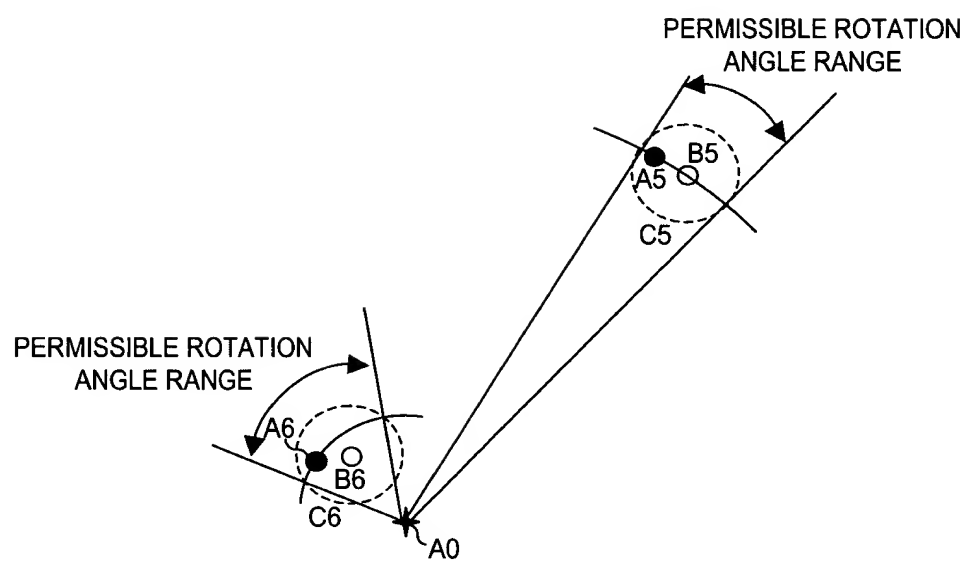
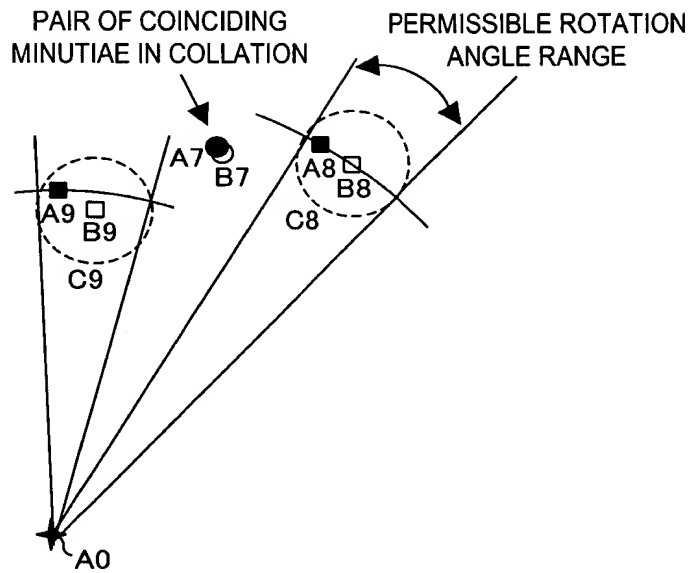


FIG. 30(C)



C8, C9: PERMISSIBLE ROTATION ANGLE RANGES
CORRESPONDING TO COINCIDING MINUTIA
PAIRS (A8, B8), (A9, B9) IN COLLATION,
RESPECTIVELY

■ □ : PERIPHERAL MINUTIAE

FIG. 31

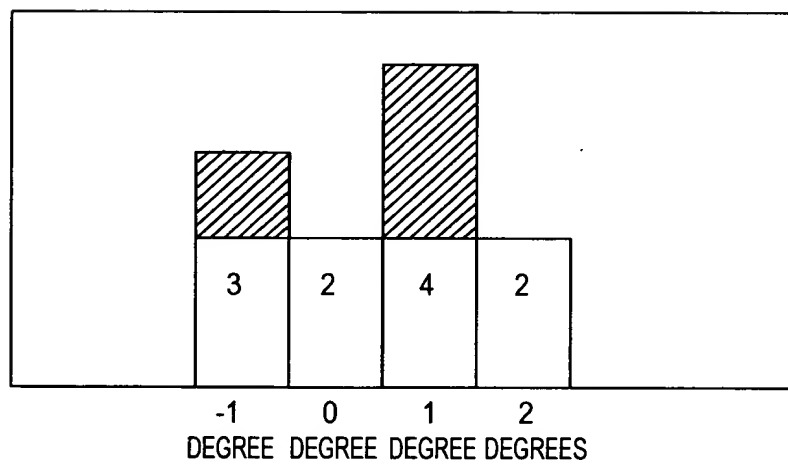


FIG. 32

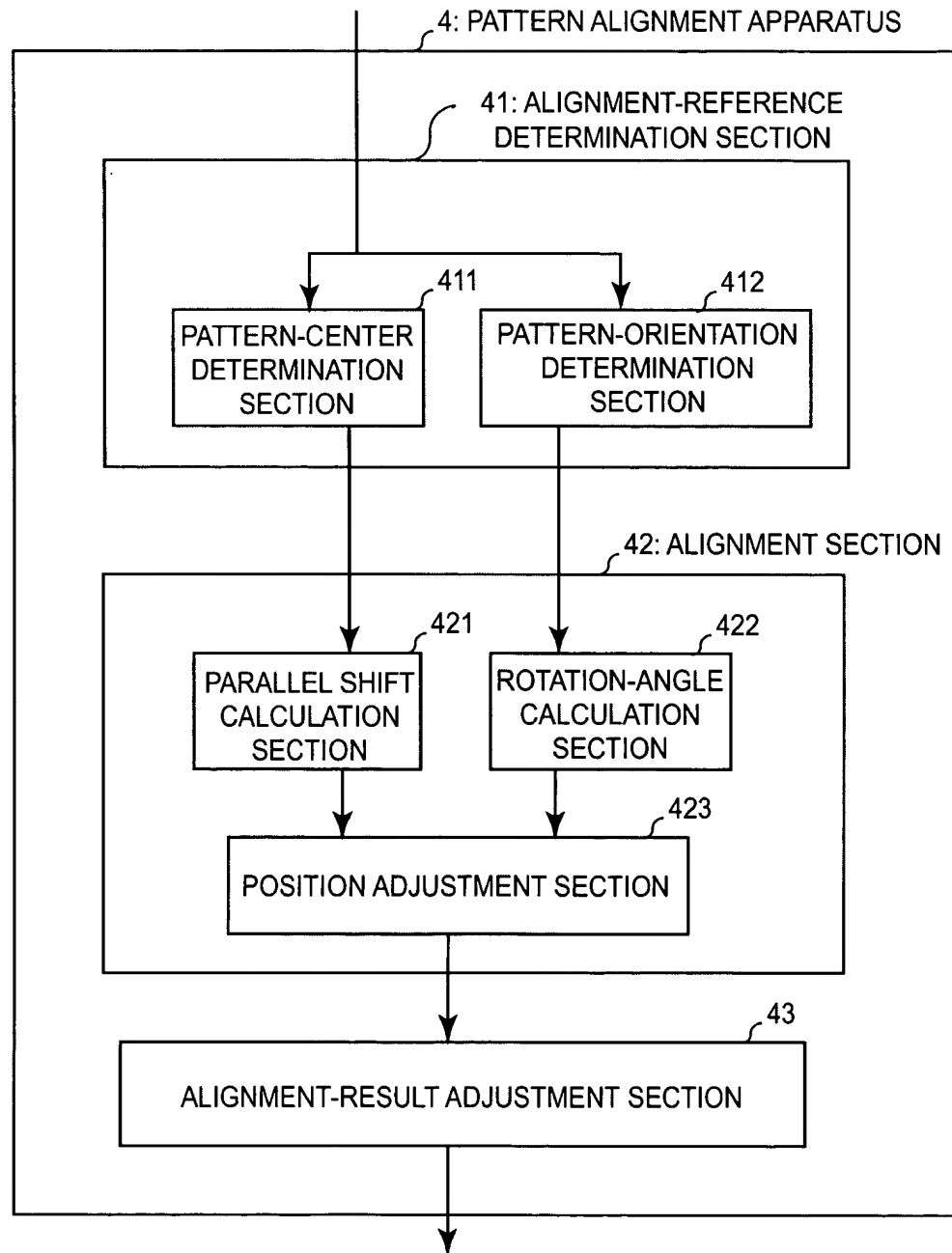


FIG. 33

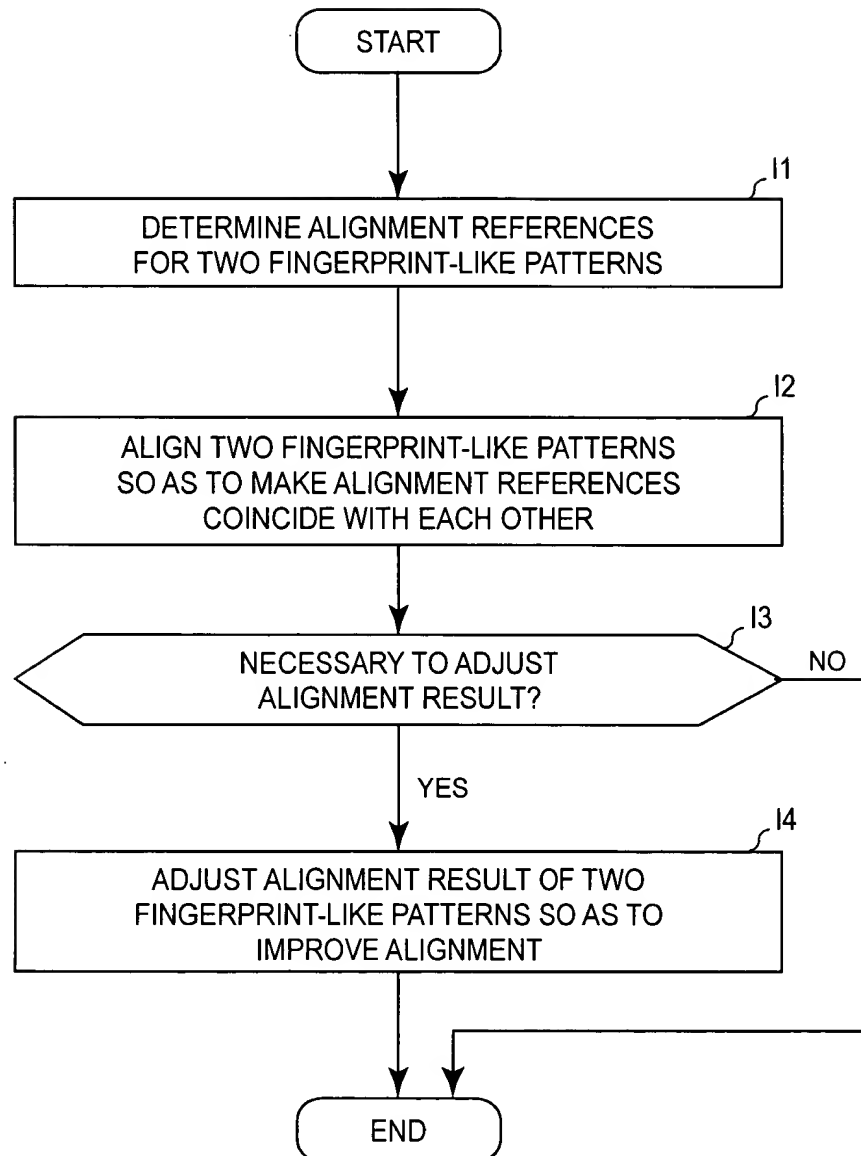


FIG. 34

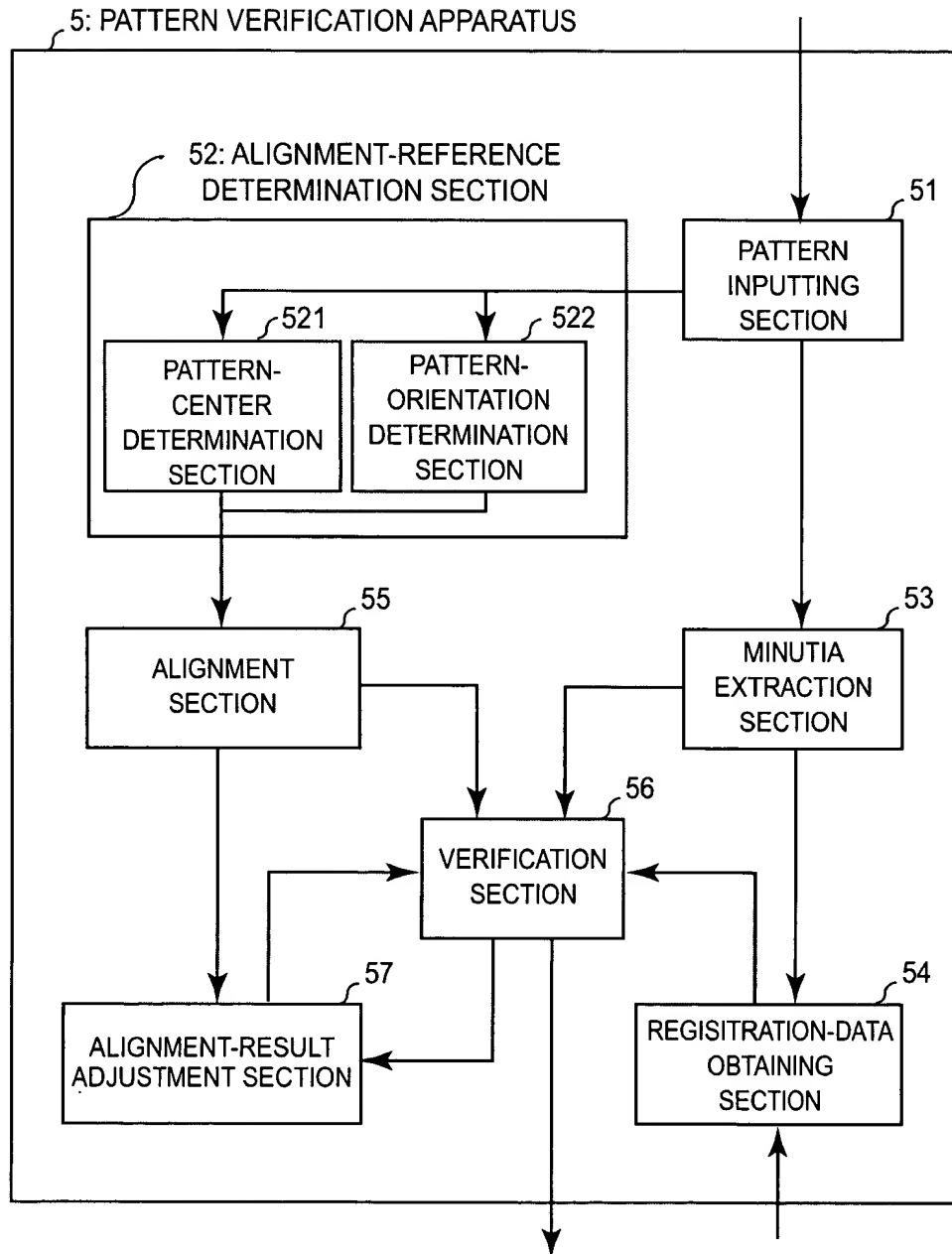


FIG. 35

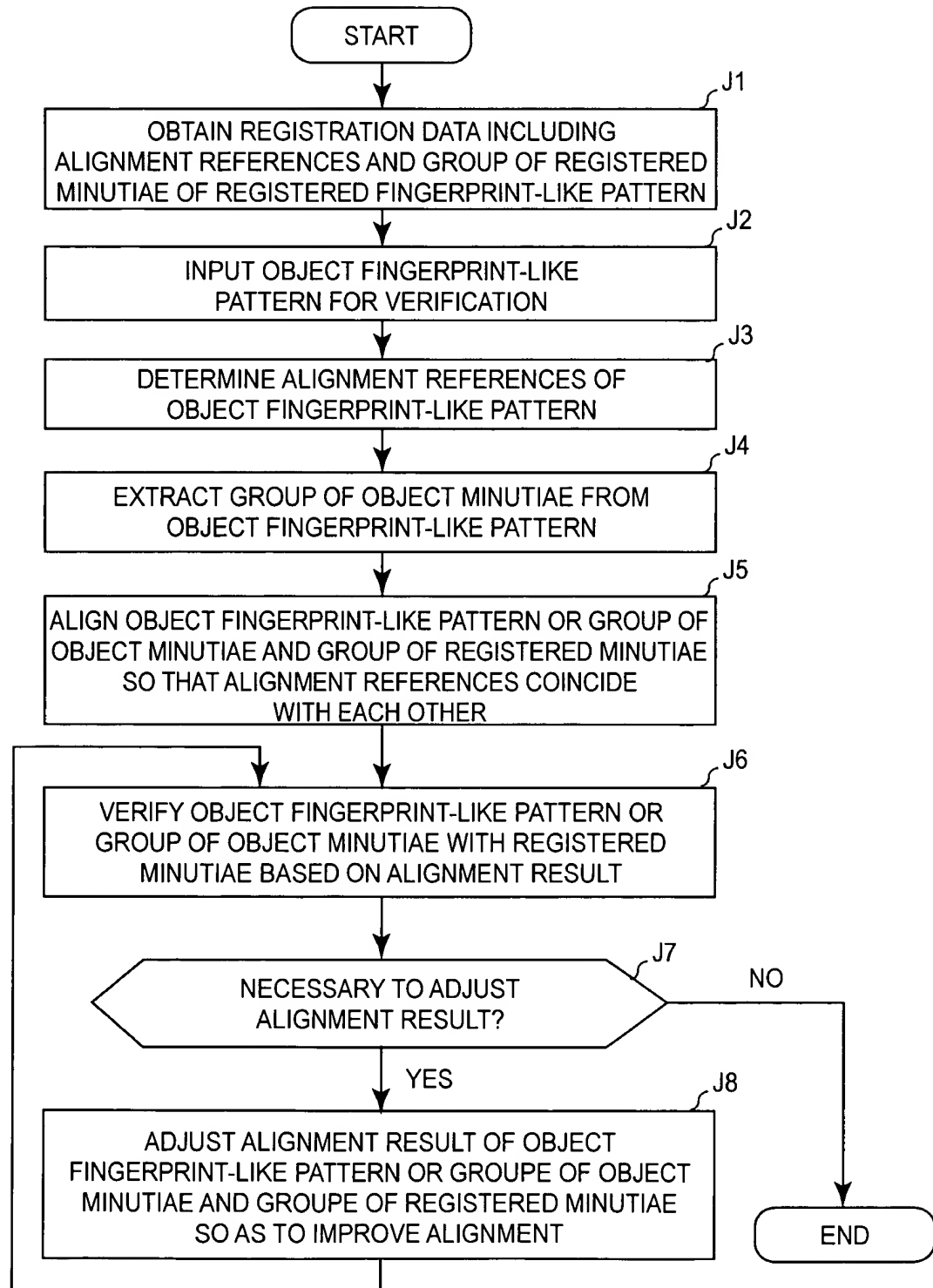


FIG. 36

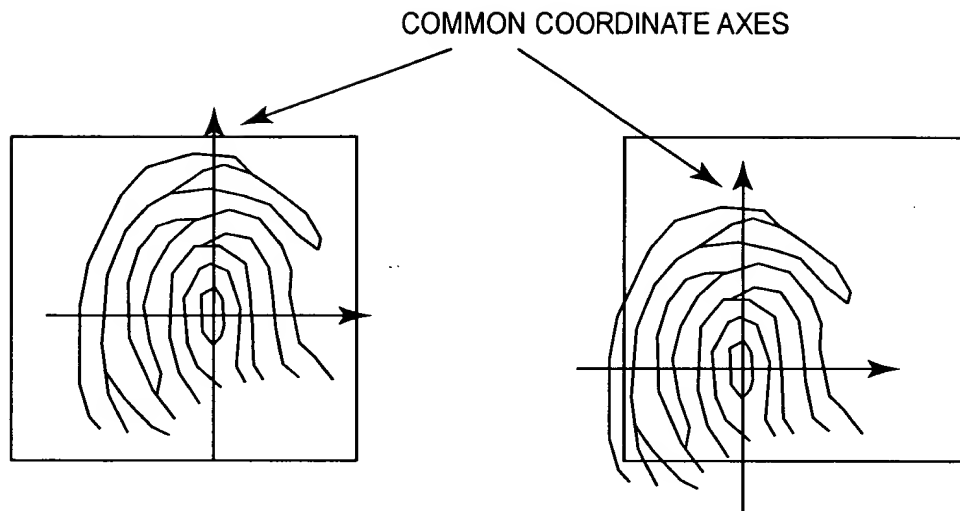


FIG. 37

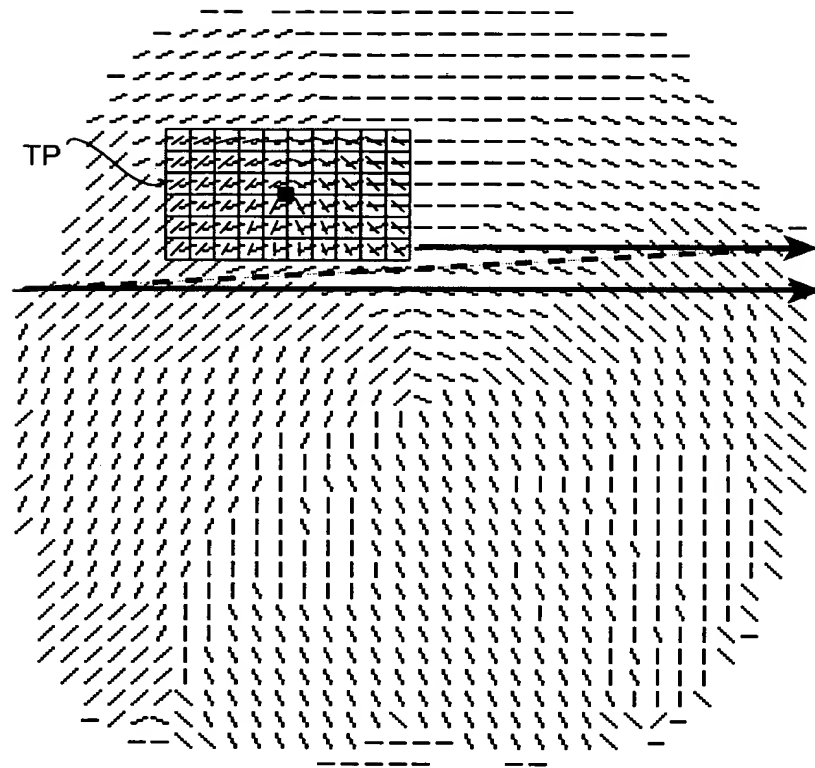
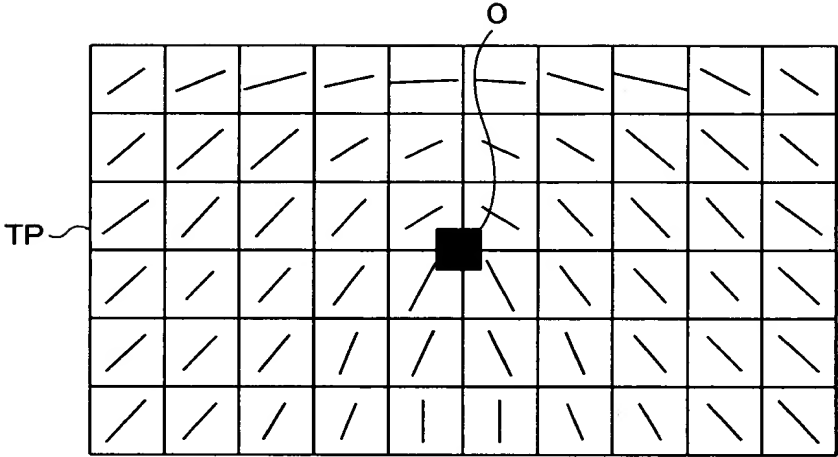


FIG. 38



■ : CENTER "O" OF FINGERPRINT

FIG. 39

DIRECTION 0	DIRECTION 1	DIRECTION 2	DIRECTION 3	DIRECTION 4	DIRECTION 5	DIRECTION 6	DIRECTION 7
—	↗	↘	↙		↖	↗	↘

FIG. 39

FIG. 40(A)

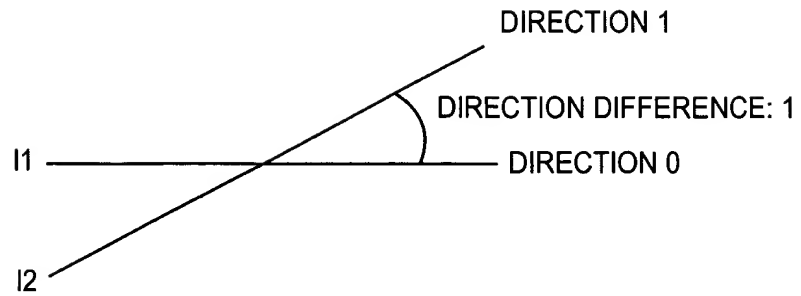


FIG. 40(B)

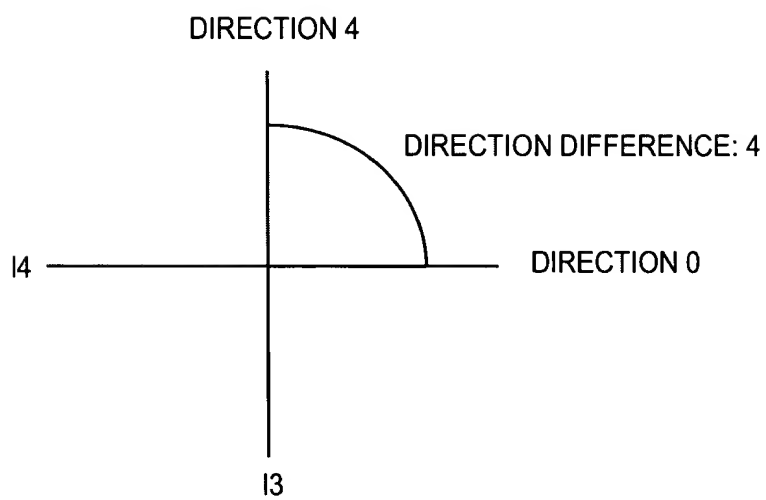


FIG. 40(C)

